

Lyme Disease

What is Lyme disease?

Lyme disease is a bacterial disease that some people get after being bitten by ticks that are infected with an organism named *Borrelia burgdorferi*.

Who gets Lyme disease?

People of any age can get Lyme disease. It usually occurs during the summer in people who work or recreate outdoors and thus have a greater chance of coming into contact with infected ticks. Dogs and horses also have been known to get Lyme disease.

How is the organism spread?

The bacteria that cause Lyme disease are spread by ticks. The most likely tick vector is *Ixodes scapularis (dammini)*, the deer tick. Transfer of the Lyme disease bacteria from the infected tick to a person probably does not occur unless the tick has been attached to the body for 36 hours. You cannot get Lyme disease from animals or other people.

What are the symptoms of Lyme disease?

In most people, the first symptom of Lyme disease is a skin lesion called erythema migrans (EM) that forms at the site of the tick bite. This lesion is red and slowly gets bigger, usually with a clearing in the center. People might also have flu-like symptoms, such as fatigue, fever, headache, stiff neck, muscle or joint pain, possibly lasting several weeks. In some cases, these first symptoms don't occur. If this happens, or if the early disease is not treated, weeks to months after the tick bite other problems may develop such as nervous disorders, heart problems, or joint swelling and pain.

How soon after exposure do symptoms appear?

The EM may appear within 3-32 days (usually within 1-2 weeks) after being bitten by an infected tick.

Where is the organism that causes Lyme disease found?

The organism is maintained in wild rodents, deer, other mammals and certain ticks of the *Ixodes sp.*. It is transferred to people by the bite of the infected tick.

What is the treatment for Lyme disease?

Specific antibiotics are used to treat Lyme disease. Treatment of the EM stage usually lasts for 10 to 30 days. Treatment of later stages of disease may be more lengthy.

How can Lyme disease be prevented?

Avoid tick-infested areas, such as tall grasses, whenever feasible. When this is not possible, wear light-colored clothing with long sleeves and long pants and tuck pants into socks. Clothes may be pretreated with a tick repellent called permethrin. Other tick repellents are available for treating the skin. Be sure to follow label instructions before using any repellent. If working or playing in a tick-infested area, watch for and remove any surface ticks and look for ticks on the body every 3-4 hours. Remove any attached

ticks promptly and carefully by gripping the tick with tweezers as close to the skin as possible and using a gentle steady pulling action. Protect hands with gloves, cloth or tissue when removing ticks from people or animals.

Is there a vaccine for Lyme disease?

There is currently no approved vaccine for Lyme disease.

Prepared by the Virginia Department of Health, Revised February 2004